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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,064	10/08/2003	Chen Chuan-Fa	DAF006 US	9474

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EXAMINER	
RO, BENTSU	
ART UNIT	**PAPER NUMBER**
2837	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/682,064	Applicant(s) CHUAN-FA, CHEN	
	Examiner Bentsu Ro	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 20 December 2004.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 and 3-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 5-10 and 15-19 is/are allowed.

6)☒ Claim(s) 1,3,4 and 11-14 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

SECOND OFFICE ACTION --- A NONFINAL REJECTION

1. The indicated allowability of claims 2 and 4-19 is withdrawn in view of the newly discovered reference(s) to Horng et al US Patent No. 6,815,916. Rejections based on the newly cited reference(s) follow.

2. Applicant should amend claims 15, 17, 19 as follows:

- Claim 15, line 2, change "said fan" to --a fan--.
- Claim 15, lines 2-3 change "said PWM signal" to --a PWM signal--.
- Claim 15, line 5, change "said system" to --said method--.
- Claim 15, line 10, change "said system" to --said method--.
- Claim 17, line 6, change "said system" to --said method--.
- Claim 19, lines 1-2, change "said system" to --said method--.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Horng et al US Patent No. 6,815,916.

In order to avoid confusion, the examiner must briefly explain Horng's invention. Horng's Figs. 1-3 show three different prior art fan motor drive circuits by using pulse width modulation method. Figs. 4, 6, 7 show three different fan motor drive circuits of Horng's invention, again using pulse width modulation. The difference between Figs. 1-3 and Figs. 4, 6, 7 is that, in Figs. 1-3, the pulse width modulation is performed before the VCC whereas in Figs. 4, 6, 7 the pulse width modulation is performed after the VCC.

One most important thing common to all driving circuits of Horng (both prior art circuits and inventive circuits) is that the pulse width modulation signal is provided by a portable computer, see Horng's patent column 1, lines 48-52.

Claims 1 and 3 read onto Horng's teaching as follows:

1. (Currently amended) A motor speed detecting device	Horng's Fig. 4 shows a motor winding drive circuit 10, transistors Q1, Q2, the associated resistors R2, R5 and capacitor C, all together constitute a motor speed detecting device;
for use between a fan motor	Fig. 4 shows a fan motor (the fan motor winding CL1);
and a portable computer,	the four terminals VCC, FG, GND, PWM are connected to a portable computer, see column 1, lines 16, 32, for the use of fan motor in a portable computer;
a first terminal and a second input terminal, wherein said first and second input terminals are electrically connected respectively to a constant voltage potential and a ground potential for continuously receiving an electrical power; and	the VCC terminal is a first input terminal; the GND terminal is a second input terminal;
a third input terminal electrically connected between said fan motor and said portable computer,	the PWM terminal is a third input terminal;
wherein said third input terminal receives a control signal sent by said portable computer for controlling a speed of said	the PWM terminal receives PWM control signal from the portable computer, see the previous examiner's explanation.

fan motor.	
3. The device according to claim 1, where said control signal is a PWM signal.	same above.

5. Claims 4 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horng et al.

Regarding claim 4, Horng's Fig. 4 shows a motor winding drive circuit 10, two transistors Q1 and Q2, the associated resistors and capacitor. These elements are connected to the first input terminal VCC and the second input terminal GND for generating a speed signal at the collector of transistor Q1.

Fig. 4 also shows a FG terminal, which is a speed output terminal. The FG terminal is connected to the collector of transistor Q1 and to the portable computer for outputting the speed signal to the portable computer. Thus, Horng teaches each and every claimed element except a "module". Speak differently, regarding claim 4, Horng does show everything except a "module".

A "module" is merely a self-contained unit of electronic components and circuitry. It would have been obvious to a skilled person in the art to construct a desired portion of Horng's Fig. 4 circuit into a module to achieve the same subject matter as claimed. Applicant should note that gathering the electronic components into a module does not change the performance of the circuitry.

Then why put into a module???

A module is a self-contained unit for performing a specific function. Putting the electronic components into a module would simplify the assembling line. Because module simplifies the assembling line, it would have been obvious to do so.

Claim 11 claims the same subject matter as that of claim 1 plus a heat sink and a chip. Horng's fan is used to cool a portable computer, including the cooling of electronic components (the CPU and chips). It is noted that the major electronic components are heat source. In order to dissipate the heat out of the heat source, a heat sink is always required. Thus, Horng's teaching and the well-known heat dissipating method in the electronic community meet the subject matter of claim 11.

The subject matter of claim 12 is same as that of claim 1; the subject matter of claim 13 is same as that of claim 3; the subject matter of claim 14 is same as that of claim 4; discussion is omitted.

6. In the Declaration and Power of Attorney, applicant has typed and signed his name as "Chen Chuan-Fa". Based on the US format, this represents applicant's last name as "Chuan-Fa" and first name as "Chen". Thus, the name "Chuan-Fa" has been entered as last name by USPTO.

However, the examiner believes that applicant's last name should have been "Chen", not "Chuan-Fa" because the Taiwanese name writing is different from the US name writing. In US name writing, the format is "(first name) + (last name)" or "(last name) (comma) (first name)", in Taiwan, the format is "(last name) + (first name)". Thus, the interpretation is different in these two countries.

The examiner hereby asks applicant to confirm his last name. If the last name is "Chen", then a correction is required.

7. Claims 5-10 and 15-19 are allowable.

8. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication should be directed to Bentsu Ro at telephone number (571) 272-2072.

1/14/2005

Bentsu Ro

Bentsu Ro
Senior Examiner
Art Unit 2837